

**BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE,
PILANI, GOA CAMPUS**

Mathematics Group

**Intensive Workshop on “Scientific Computation”
Workshop Schedule during July 21 – July 25, 2009**

Day	Event	Topic	Time	Venue
Day 1 21/07/09 Tuesday	Inaugural Function		09:30 a.m.- 10:00 a.m.	CC-117
	Tea-Break		10:00 a.m.- 10:15 a.m.	
	Lecture Session 1 (PDJ)	Quick Review on MATLAB and Solving Initial Value problems (IVP) using MATLAB	10:15 a.m.- 11:15 a.m.	CC-117
	Tea-Break		11:15 a.m.- 11:30 a.m.	
	Lecture Session 2 (PDJ)	Solving Boundary Value Problems (BVP) using MATLAB	11:30 a.m.- 12:30 p.m.	CC-117
	Lab Session	Lab Sheet-1 (Initial value problems & Boundary Value Problem)	03:00 p.m.- 4:30 p.m.	CC-219
Day 2 22/07/09 Wednesday	Lecture Session 1 (PDJ)	An Introduction to Finite Difference Method (FDM) and Elliptic PDE	09:30 a.m. – 10:45 a.m.	CC-117
	Tea-Break		10:45 a.m. - 11:00 a.m.	
	Lecture Session 2 (PDJ)	Parabolic and Hyperbolic PDEs	11:00 a.m. – 12:30 p.m.	CC-117
	Lab Session	Lab Sheet-2 (Elliptic, Parabolic and Hyperbolic PDE)	03:00 p.m.- 04:30 p.m.	CC-219
Day 3 23/07/09 Thursday	Lecture Session 1 (SK)	An Introduction to Finite Element Method (FEM) and Finite Volume Element Method (FVEM)	09:30 a.m. – 10:45 a.m.	CC-117
	Tea-Break		10:45 a.m. - 11:00 a.m.	
	Lecture Session 2 (SK)	Solving Differential Equations using FEM	11:00 a.m. – 12:30 p.m.	CC-117
	Lab Session	Lab Sheet-3	03:00 p.m.- 04:30 p.m.	CC-219

Day 4 24/07/2009 Friday	Lecture Session 1 (AK)	An Introduction to Optimal Control Problems	09:30 a.m. – 10:45 a.m.	CC-117
	Tea-Break		10:45 a.m. - 11:00 a.m.	
	Lecture Session 2 (AK)	An Introduction to Optimal Control Problems	11:00 a.m. – 12:30 p.m.	CC-117
	Lab Session	Lab Sheet-4	03:00 p.m.- 04:30 p.m.	CC-219
Day 5 25/07/09 Saturday	Lecture Session 1 (PD)	An Introductory lecture on Computational Fluid Dynamics (CFD)	09:30 a.m. – 10:45 a.m.	CC-117
	Tea-Break		10:45 a.m. - 11:00 a.m.	
	Lecture Session 2 (PD)	An Introductory lecture on Computer Aided Analysis & Design (CAAD)	11:00 a.m. – 12:30 p.m.	CC-117
	Valedictory Function and Feed Back		12:30 p.m. - 01:00 p.m.	CC-117

PDJ : Dr. P. Dhanumjaya
AK: Dr. Anil Kumar
SK: Dr. Sarvesh Kumar
PD: Prof. Prasanta Deb